

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/765,184	01/18/2001	Duane Joseph Buening	DP-300203	6840	
7	590 09/16/2002				
MARGARET A. DOBROWITSKY			EXAMINER		
DELPHI TECI	HNOLOGIES, INC il Code: 480-414-420		MOHANDE	MOHANDESI, IRAJ A	
P.O. Box 5052			ART UNIT PAPER NUMBER		
Troy, MI 48007-5052			2024		

DATE MAILED: 09/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

			1ª			
	Application No.	Applicant(s)	V			
•	09/765,184	BUENING ET AL				
Office Action Summary	Examiner	Art Unit				
	Iraj A Mohandesi	2834				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on 24.	<u>June 2002</u> .					
2a)⊠ This action is <b>FINAL</b> . 2b)⊡ Th	nis action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims						
4) Claim(s) 1-17 is/are pending in the application	n.					
4a) Of the above claim(s) is/are withdra	wn from consideration					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-17</u> is/are rejected.						
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>01/18/2001</u> is/are: a)□ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreig	gn priority under 35 U.S	S.C. § 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documen						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)	•					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Noti	rview Summary (PTO-413) Paper N ce of Informal Patent Application (F er:	lo(s) PTO-152)			

· Application/Control Number: 09/765,184

Art Unit: 2834

#### **DETAILED ACTION**

#### Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 06/20/02 was filed after the mailing date of the 06/04/02 on 06/07/02. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

## Response to Amendment

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi US (5,274,322) in view of Watkins US patent 4,947,072.

Hauashi'322 discloses an alternating current generator comprising; a stator (16); and a rotor (18), the rotor comprising a plurality of pole pairs (column 5,line 54) the stator comprising a first and second winding are three phase windings (10); the first and second windings are physically offset one relative to another(Fig.6); wherein the first winding wound in one of and Y configuration (12,"121-122-123) and the second winding wound in the other one of the delta connection(10,101"02" 103 "); a stator comprising; a substantially annular portion; a plurality of teeth

Application/Control Number: 09/765,184

Art Unit: 2834

extending radially inwardly from the annular body portion; a plurality of slots defined between said teeth; at least two winding wound around said teeth and insert in to the slots (Fig. 6); the windings are three phase winding (column3,line 41,46)' the first and second winding are connected to a rectifier bridge(11.Fig.1); the stator further comprising a plurality of teeth defining a plurality of slots; (Fig.6); the first and second winding are positionally shifted from each other an electrical angel of 30 degree (column 2,line 13-17); With respect to claim 16. having p=3 (p, number of phases) the equation 90/p will inherently result in a 30 degree angle. However Hauashi'322 teaches all limitation of claimed invention except only a stator comprising a first winding wound in full pitch pattern with at least one complete loops surrounding a first predetermined number of teeth of said stator and second winding wound in a short pitch pattern with at least one complete loop surrounding a second predetermined number of said teeth ,said predetermined number being different than said second predetermined number.

Watkins'072 discloses a stator (Fig. 1 column 4,limne 51)comprising a first winding wound in full pitch pattern with at least one complete loops surrounding a first predetermined number of teeth of said stator and second winding wound in a short pitch pattern with at least one complete loop surrounding a second predetermined number of said teeth ,said predetermined number being different than said second predetermined number. (Abstract, column 5, line 5-45 and column 8,line 32-54) for the purpose reducing the torque.

Application/Control Number: 09/765,184

Art Unit: 2834

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine **Hauashi'322** vehicle generator with a stator having a first winding wound in full pitch pattern with at least one complete loops surrounding a first predetermined number of teeth of said stator and second winding wound in a short pitch pattern with at least one complete loop surrounding a second predetermined number of said teeth ,said predetermined number being different than said second predetermined number., which was taught by **Watkins'072** to advance an operating function while creating less torque ripple.

## Response to Amendment

Applicant's arguments with respect to claim1, 6,11 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Application/Control Number: 09/765,184

Art Unit: 2834

Page 5

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

## Communication

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj A Mohandesi whose telephone number is (703)305-3242. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-0377.

I.M September 11, 2002

NESTOR PAIMIREZ
SUPERAISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800